

LIST OF SOUTH AUSTRALIAN RHOPALOCERA.

By OSWALD B. LOWER, F.E.S.

[Read February 7, 1893.]

As some ten years have elapsed since the publication of Mr. Tepper's list of South Australian Rhopalocera (Trans. Roy. Soc. S.A., 1881), I have deemed it advisable to write the present paper, especially as the list has been considerably augmented by the addition of several interesting species hitherto unrecorded for this colony. It is usually considered, I believe, that the scarcity (?) of Rhopalocera in this colony is due to the great dryness during the season of flight; also the severe droughts we are subjected to, &c. But my honest conviction is that the scarcity is due to the want of systematic collecting. Unfortunately, we possess but very few energetic entomologists among our members, and until we have more workers must rest content with slow progress in this particular branch. It will be gratifying, however, to know that we have found several species new to the colony. In Tepper's list 27 species were said to occur here; in the present paper I am able to bring the total up to 40 species, chiefly through the diligent collecting of my two brothers—Messrs. Harold and Rupert Lower. I have excluded the doubtful species, a list of which will be found at the end of this paper. All the species have been taken within a radius of 30 miles of Adelaide, excepting the Port Lincoln species, and I have no doubt that when other districts are properly worked our list will be still further increased.

PAPILIO, *Linn.*

1. PAP. ERITHONIUS, *Cram.*, var. *STHENELUS*, *McLeay.*

King's Survey Aust., II., p. 457, n. 133, 1827; *Tepp.*, Trans. Roy. Soc., S.A., for 1881.

Blackwood, Reedbeds, Macclesfield, in October and November; a scarce species; larvæ found at Brighton, feeding on *Psoralea adscendens*, in February.

TERIAS, *Swain.*

2. T. SMILAX, *Don.*

Pap. S., Ins. N.H., t. 20, f. 3, 1805; *Tepp.*, Trans. Roy. Soc. S.A., for 1881.

Syn.—*T. gignana*, *Wall*, Tr. Ent. Soc., ser. iii.-iv., p. 332, n. 10, 1867; *T. sinta*, *Wall*, l.c., 1867.

Parkside, Belair, Blackwood, and Highbury, from November

to February. Most common in October, frequenting blossoms of Cape dandelion (*Cryptostemma calendulacea*), the colour of which agrees so well with the insects as to make it very difficult to discern them.

PIERIS, *Schr.*

3. P. TEUTONIA, *Fabr.*

Pap. T., Syst. Ent., p. 474, n. 137, 1775; *Tepp.*, Tr. Roy. Soc. S.A., for 1881.

Syn.—Pap. coronea, *Cram.*, Pap. Ex. 1, t. 68, B.C., 1779; female Pap. Deiopeia, *Don.*, Ins. N.H., t. 21, f. 2, 1805? P. Clytie, *Don.*, l.c., t. 19, f. 2, 1805; P. Niseia, *Macl.*, King's Surv. Aust., App. 459, n. 138, 1827.

Parkside, Blackwood, Waterfall Gully, &c.; also in the Botanic Gardens, Adelaide, frequenting *Capparis spinosa* in November, and again in March. On November 15, 1889, this species appeared in hundreds passing from south to north. The following day scarcely one was to be seen, nor have I observed them in such numbers since. Its proper food plant is *Capparis Mitchellii*, but we have reared specimens from the egg-stage by feeding with *C. spinosa*.

Egg.—Cylindrical, slightly narrowing at both ends, longitudinally grooved with 8 to 10 furrows. Colour, orange; after the larva emerge the shell becomes pearly white. The eggs are deposited on the underside of the terminal leaves in clusters of from 15 to 26. The imago deposits them at the rate of about 13 a minute, and when examined they resemble miniature ninepins. They hatch nine days after being laid. Length, $1\frac{1}{4}$ mm.

Young larvæ (on emergence).—Dull orange-yellow, head and anal segment fuscous. All the segments are furnished with long hairs, being longest on anterior segment. The young larva on exclusion begin to feed voraciously on the shell of the egg, afterwards on the leaf of food plant. Length, 3 mm.

After First Moul.—Head black, body light-brown, thickly studded with golden yellow spots and whitish hairs, giving the caterpillar a very pretty appearance. Length, 9 mm.

After Second Moul.—No perceptible difference excepting that the colour of body is more whitish, and has a somewhat polished appearance. Length, 18 to 22 mm.

Larvæ Full Grown.—Head shining black, minutely dusted with yellowish and covered with rather long, erect whitish hairs. Body shining dark-brown, with a darker dorsal streak, minutely sprinkled with short erect hairs. Second and third segments with a collar of moderate-sized golden yellow spots placed anteriorly. Fourth and fifth similar. All other segments have six golden spots about same size as preceding, only instead of

being in the form of a collar are placed triangularly. Three placed each side of dorsal streak, two anteriorly, and one posteriorly; anal segment blackish, with collar of similar spots, but rather larger than preceding, a moderate greenish lateral stripe above spiracles. Spiracles golden yellow, rather prominent. Belly and sides rather thickly studded with long white hairs. Colour of abdomen greenish yellow.

Chrysalis.—Sordid ochreous-white, the colours of imago showing through the transparent skin, especially so in the male. Head case pointed and rugose. Thoracic region strongly elevated into a roughened ridge, bearing at the junction of abdomen two spines acutely produced. Abdomen sprinkled with blackish, and each segment has a pointed protuberance, and on each side of this two small, whitish shining tubercles. Sides broadly white. Spiracles dull yellowish. The chrysalis is held in position by a fine white ligament fastened to the stem of plant. Average length of chrysalis, 15 mm.; width, about 4 mm. The imago emerges eight days after transformation. The colour agreeing very well with the white flowers of food-plant.

DELIAS, *Hub.*

4. D. AGANIPPE, *Don.*

Pap. A., Inst. N.H., t. 29, 1805; *Tepp.* (Pier. Ag.), Tr. Roy. Soc., S.A., for 1881.

Parkside, Blackwood, Petersburg, Fullarton, Teatree Gully, and Highbury, from September to January; feeds on *Loranthus linophyllus*; most common during January at Highbury. Mr. R. Lower took a specimen at Unley in June.

The female of this species is figured in Tepper's paper as *Delias* (*Pieris*) *Harpalyce*, Don., although the median discal dot is not shown. The fig., however, does not represent "Harpalyce."

CALLIDRYAS, *Bdi.*

6. C. PYRANTHE, *Linn.*

Pap. P., Syst. Nat. 1, p. 469, n. 66, 1758.

Syn.—Pap. Chryseis, *Dru.*, Ill. Ex. Ent. 1, t. 12, f. 3, 4, 1773; Pap. Gnome, *Fab.*, Syst. Ent. App., p. 808, 1775; P. Gnoma, *Fab.*, Syst. Ent. App., p. 828, n. 152, 153, 1776; P. Alcyone, *Cram.*, Pap. Ex. I., t. 58, A.-C., 1779; P. flavocinerascens, *Goeze*, Ent. Beyt., III. I., p. 183, n. 86, 1779; P. Phillipina, *Cram.*, Pap. Ex. IV., t. 361, C.D., 1782; P. nephte, *Fab.*, Syst. Ent. III., 1, p. 190, n. 588, 1793; P. Ilea, *Fab.*, l.c., Supp., p. 426, 1798; P. Minna, *Herbst.*, Nat. Schm., V., t. 89, fig. 1, 2, 1792; C. Thiserilla, *Bdv.* (nec *Wall.*), sp. gen. I., p. 609, n. 3, 1836; C. Evangelina, *Butl.*, Tr. Ent. Soc., p. 11, n. 6, 1870.

I have seen a specimen of this insect, taken by Mr. E. Guest at Balhannah. It was hovering over apple blossoms when discovered. It is a fairly common Queensland species, but hitherto unrecorded for South Australia.

DANAIS, *Latr.*

6. D. PETILIA, *Stoll.*

Pap. p., Supp. *Cramer's* Pap. Ex., p. 132, t. 28., f. 3, 1787-91. Parkside, Waterfall Gully (rather common), Mount Gawler, Blackwood, &c., from November to May. Most common during April, but never very abundant.

Tepper calls this *D. Chrysippus*, Linn., in his list, a widely different species, and not known to occur in Australia.

D. ERIPPUS, *Cramer.*

Pap. E., Pap. Ex., I., t. 3, A.B., 1775; *Guest*, Tr. Roy. Soc. S.A., vol. VIII., p. 61, 1886.

Syn.—*D. plexippus*, Linn. (Papilio), Mus. Ulr. p. 262, 1764; *D. Archippus*, Linn. (Papilio), Syst. Nat. 1, 2, p. 767, 1767; *D. Archippe*, *Godt.*, Enc. Meth., IX., p. 184, n. 28, 1819; *Anosia megalippe*, *Hb.*, Samml. Ex. Schm., 1806-24.

Waterfall Gully and Brighton, two specimens. This species is now very plentiful at Waterfall Gully, frequenting its food-plant (*Gomphocarpus fruticosus*) during April and May. The larva is too well-known to need description, but I may state, so far as my experience goes, the bred specimens cannot compare with those caught on the wing for size or colour. The species is greatly subjected to the attacks of a parasitic dipter (the name of which I have been unable to find). It is our finest species, sometimes measuring $5\frac{1}{2}$ inches in expanse.

XENICA, *Westw.*

8. X. ACHANTA, *Don.*

Pap. A., Ins. N. H., A. 22, f. 2, 1805.

Syn.—*Tisiphone Achanthe*, *Hüb.*, Zutr. Ex. Sch., f. 267, 268, 1823; *Lasiomata ocrea*, *Guest*, Tr. Roy. Soc. S.A., V., p. 35, 1882.

Common during December and January at Waterfall Gully; also taken near Balhannah. Not mentioned in Tepper's 1881 list.

9. X. KLUGII, *Guer.*

Sat. K., Voy. Coq., t. 17, fig. 2, 1829; *Tepp.*, Tr. Roy. Soc. S.A., for 1881.

Syn.—*Satyrus* Singa, *Bdv.*, *Voy. Astrol. Lep.*, p. 145, n. 3, 1832; *Las. philerope* (pars), *Westw.*, l.c. 19, 1851.

Blackwood, Waterfall Gully, Belair, &c.; most common at Belair during November and December.

HETERONYMPHA, *Wallen.*

10. HET. MEROPE, *Fab.*

Pap. M., *Syst. Ent.*, p. 495, n. 228, 1775; *Tepp.*, *Tr. Roy. Soc. S.A.*, for 1881.

Syn.—*Oreas Nubila* (Enomais, *Hb.*, *Samm. Ex. Sch.*, I., t. 94, figs. 1-4, 1806; female, *Pap. Themis*, *Dalm.*, *Anal. Ent.*, p. 42, n. 10, 1823; male, *Sat. Archemor*, *Godt.*, *Enc. Meth.*, IX., p. 500, n. 82, 1819.

Woodside, Belair, Mount Gawler, Teatree Gully, Blackwood; common during November, December, and January. I have noticed that the male insects appear earlier than the female.

PYRAMEIS, *Hub.*

11. P. ITEA, *Fab.*

Pap. Itea, *Syst. Ent.*, p. 498, n. 238, 1775; *Tepp.*, *Tr. Roy. Soc.*, 1882.

Parkside, Blackwood, Yorketown, Mount Gawler, Belair, &c.; common September to March. Feeds on stinging nettle (*Urtica urens*). I have bred them from the chrysalis in November, and also in March, so that it would appear to have two broods during the year.

12. P. KERSHAWI, *McCoy.*

Cynthia K., *Ann. N. H.*, ser. 4, I., p. 76, 1868; *P. Cardin*, *Tepp.*, *Tr. Roy. Soc.*, for 1881.

Common at Parkside, Petersburg, Yorketown, Waterfalls, &c. I have bred this species in December, the chrysalis being found under *dry* clumps of cowdung. It is on the wing from August to May.

JUNONIA, *Hb.*

13. J. VELLIDA, *Fab.*

Pap. V., *Mant. Ins.*, p. 35, n. 366, 1787; *Tepp.*, *Tr. Roy. Soc.*, IV., 1882.

Common at Parkside, Woodside, Waterfall Gully, Belair, &c., from September to March, frequenting dry ground, especially those of a red-clay nature, the colour of which no doubt protects the species from observation. Sometimes they are very dwarfed in appearance. I have specimens less than one inch in expanse. In *Tepper's* list the name is incorrectly spelt as "Junonisa."

LUCIA, *Swain*.14. LUCIA LUCANUS, *Fab.*

Hesp. L., Ent. Syst., III., 1, p. 322, n. 221, 1793.

Syn.—*L. limbaria*, *Swain* (nec Blanch), Zool. Ill. Ins., II., t. 135, 1833; *Chrysophanus discifer*, *H. S.*, Stett. Ent. Ziet, p. 72, n. 21, t. 4, f. 21, 1869; *Tepp.* (*Lycæna D.*), Tr. Roy. Soc. S.A., IV., 1882.

As Miskin rightly points out, this species has been confused with *Chrysophanus aurifer*, Blanch, a very dissimilar species, and to my knowledge not taken here, although said to be, the mistake no doubt being caused by wrong identification.

Woodside, Black Forest (South-road), Parkside, &c., not common, frequents stinkwort (*Inula graveolens*) during October to May.

LAMPIDES, *Hüb.*15. L. BÆTICUS, *Linn.*

Pap. B., Syst. Nat., 12 ed., I., 2, p. 789, n. 226, 1767; *Tepp.* (Cupido B.), Trans. Roy. Soc., IV., 1882.

Syn.—*Hesperia Bætica*, *Fab.*, Ent. Syst., III., 1, p. 280, n. 77, 1793; Pap. Colutheæ, *Fuess*, Schweiz. Ins., p. 31, n. 594, f. 2, 1775; Pap. Damætæ, *Fab.*, Syst. Ent., p. 526, n. 350, 1775; Pap. Damætæ, *Esper.*, Ges. Eur. Schm., t. 28, f. 1a, 16, t. 29, f. 1a 1b, 1806-18; Pap. pisorum, *Fourc.*, Ent. Paris, II., p. 242, n. 25, 1785; Pap. Archias, *Uram.*, Pap. Ex., II., t. 181, f.c. 1777.

A cosmopolitan sp. Parkside, Woodside, &c., &c. Common during December, November, to February.

LYCÆNA, *Fab.*16. L. BIOCELLATA, *Feld.*

Reise Novara, Lep., II., p. 280, n. 352, t. 35, f. 14, 1869.

Syn.—*Cupido adamapuncta*, *Tepp.*, Tr. Roy. Soc. S.A., IV., 1882.

Parkside, Blackwood, Waterfall Gully, from August to February. Most common at Blackwood in August.

17. L. LABRADUS, *Godart.*

Poly. L., Enc., Meth., IX., p. 680, n. 197, 1819.

Syn.—*Lyc. communis*, *H. S.*, Stett. Ent. Zeit., p. 72, n. 36, 1869; *Lyc. Alsulus*, *H. S.*, l.c., 1869, p. 75; female, Poly. Diogenes, *Blanch*, Voy. Pole Sud., IV., Ins., p. 397, t. 5, f. 7-8, 1855; *Lyc. Phœbe*, *Murray*, Ent. Mo. Mag., X., p. 107, 1873; *Cupido delicata*, *Tepp.*, Tr. Roy. Soc. S.A., IV., p. 30, t. 2, f. 12, 1882; *Lycæna pervulgatus*, *Guest*, l.c., V., p. 36, 1882.

Common from December to March. Waterfall Gully, Woodside, Belair, Parkside, &c.

18. L. SERPENTATA, *H. S.*

Ent. Zeit., p. 74, p. 32, 1869.

Syn.—Cupido molybdena, *Guest*, Tr. Roy. Soc., S.A., IV., p. 36, 1882. *C. fasciola*, *Tepp.*, l.c., p. 30, t. 2, f. 13, 1883.

Waterfalls, Parkside, &c. Common. On the banks of the River Torrens (at the back of Police Barracks) we have taken this species in abundance during January and February, frequenting a weed.

19. L. AGRICOLA, *D. H. and W.*

Lucia A., Gen. D.L., II., p. 496, note t. 76, f. 4, 1850-2; *Tepp.*, Tr. Roy. Soc. S.A., IV., p. 29, t. 2, f. 8, 1882.

Belair and Blackwood, not uncommon during October and November.

HOLOCHILA, *Feld.*

20. H. HEATHI, *Cox.*

L. Heathi, Ent., IV., p. 402, 1873.

Syn.—*Lyc. paradoxa*, *Guest*, Trans. Roy. Soc. S.A., 1882.

Waterfalls, Belair, Blackwood, &c. October to January, most common at Belair in January; frequenting flowers of *Bursaria spinosa*, the colour of which agrees remarkably well with that of the insect, *i.e.*, the underside.

21. H. ERINUS, *Fab.*

Pap. E., Syst. Ent., p. 525, n. 348, 1775.

Syn.—*H. anita*, *Semp.*, Mus., Godf., Lep., XIV., p. 163, 1878; male, *H. hyacinthus*, *Sp.*, l.c. 162, 1878; Scott, Mss. *Lyc. bimaculosa*, *Leach*, Mss.; *Cupido simplex*, *Tepp.*, Tr. Roy. Soc., S.A., 1881; *Lyc. Mørens*, *Ros.*, Ann. *H. S.*, ser. 5, XVI., p. 377, 1885; *Pol. subpallidus*, *Lucas*, Pro. R. Soc. Q., VI., 1889.

Cherry Gardens, Woodside, Belair, Blackwood. September to February, very common at Blackwood in February.

Our species appear to be the var. (?) *Mørens*, Rosen, but I think it is a good species, and not a variety.

HYPOCHRYSOPS, *Feld.*

22. HYP. IGNITA, *Leach.*

Lyc. I., Zool. Misc, I., p. 136, t. 60, fig. 1-3, 1814.

Port Lincoln and Blackwood. Very scarce, taken during November and December. Beaten from *Acacia pycnantha*,

which is in all probability its food plant; as an allied species *H. delicia*, Hew., feeds on "Blackwood" (*Acacia melanoxylon*). This beautiful specimen has not been recorded previously for S.A.

IALMENUS, *Hub.*

23. I. ILLIDGEI, *Lucas.*

Proc. Royal Soc. Queensland, p. 156, f. 1-2, 1889.

Parkside and Highbury. Common in larval state, but more scarce in the wing. Not previously taken here.

In Miskin's Catalogue for 1891 I notice that this species is quoted as synonymic with *ictinus*, Hew. Now, I am always amenable to reasonable queries, but I think Miskin goes a little too far. There is as much difference, if not more, between the two above-mentioned than between *Lyc. agricola*, D. H. and W., and *serpentata*, H. S. If they are the same as Miskin says, how is it that we do not get "ictinus" down here? And how is it that our larvæ are *green*, whilst the Brisbane and Victorian forms are *brown*? The typical "Illidgei" differs very little from our species, and is immediately recognisable by the absence of black markings on underside, which are so prominent in the true "ictinus." Larva full fed. Length, 26 mm. Moderately stout, tapering at both ends. Head small, shining black, with a few whitish scattered strigula. Body bright yellowish-green, sides more yellowish; second segment with two curiously raised wart-like protuberances of a dark crimson colour, which are thickly covered with moderately long hairs; third and fourth segments with somewhat similar protuberances, but not hairy, like second. Segments from seven to ten inclusive are marked with curious uninterrupted wedge-shaped spots on dorsum. On each side of these spots is a deep crimson blotch, corrugated at sides, the posterior portion being raised in the form of an erect projection—those on anal segment much larger—sparsely furnished with hairs. Spiracles ochreous-yellowish, margined with brown. Beneath each spiracle is a tuft of scattered hairs, generally about six. Anal segment is densely covered with short blackish hairs. Belly light green, sides densely clothed with short whitish hairs.

Chrysalis pitchy-black, shining. Abdominal segments marked with ochreous-yellow lines. A similar line placed dorsally from head to base of thorax, and continued round the wing-covers. Spiracles orange-yellow. Length, 13 to 15 mm. Feeds on *Acacia pycnantha*, the larva being covered with small ants. The chrysalis is usually found at the foot of the tree, and the perfect insect emerges in from six to nine days, males predominating.

24. I. INOUS, *Hew.*

Ill. D. L., p. 54, n. 3, t. 24, fig. 1-2, 1865.

Syn.—*I. icilius*, *Hew.*, l.c., fig. 3; *Cupido ceneus*, *Tepp.*, *Trans. R. Soc. S.A.*, IV., p. 29, t. 2, f. 9, 1882.

Parkside (rare), Blackwood, Highbury, Belair, &c., November to January. Most common at Belair in January.

OGYRIS, *Westw.*

25. *O. OTANES*, *Feld.*

Reise Nov. Lep., II., p. 217, n. 234, t. 28, f. 1-3, 1865; *Tepp.*, *Tr. Roy. Soc. S.A.*, IV., p. 31, t. 2, f. 1, 1882; *Tepp.*, male, *O. halmaturia*, male, *Nat. Ins. S.A.*, part II., p. 12, 1890.

Victor Harbor, Kangaroo Island, Yorketown. December to February. Most common at Yorketown (frequenting "*Mallee*," *E. oleosa*) in February. *Miskin* thought this might be a small form of "*Genovera*," *Hew.*, but this is wrong.

As will be noted above, the male is described as the male "*halmaturia*."

26. *O. IDMO*, *Hew.*

Cat. Lyc., B. M., p. 2, n. 7, t. 1, f. 3, 4, 1850-52.

Syn.—Male, *O. halmaturia*, *Tepp.*, female, *Nat. In. S.A.*, pt. II., p. 12, 1890.

Pt. Lincoln, two specimens, taken by the Rev. T. Blackburn, also at Kangaroo Island, where Mr. *Tepper* informs me it is common.

As will be seen above, the male of this species has been described as the female of *O. halmaturia*, *Tepp.*, the description of which tallies exactly with *idmo*, so that *Tepper's* name must rank as synonymic.

27. *O. ORÆTES*, *Hew.*

Female, *Cat. Lyc.*, B. M., p. 3, n. 12, t. 1, f. 12, 13, 1862; male, *Tepp.* *Tr. Royal Soc. S.A.*, 1886 (*O. amaryllis*).

Yorketown, Moonta, not uncommon, frequenting *Eucalyptus oleosa* in February. I once obtained during November at Belair chrysalides of this species under the bark of *Eucalyptus rostrata*, but was unable to rear them.

27. *O. AMARYLLIS*, *Hew.*

Female, *Cat. Lyc.*, B. M., p. 3, n. 11, t. 1, f. 5, 6, 1862; *Tepper*, *Tr. Roy. Soc. S.A.*, 1886; *Miskin*, male, *Proc. Linn. Soc.*, N.S.W., 1890.

Five specimens from Yorketown; frequents *Euc. oleosa*.

This and the previous species have been confused by Mr. *Tepper* in his paper of 1886 (*Tr. Roy. Soc. S.A.*) inasmuch that after quoting *Hewitson's* (*Newman's*?) description of the female he proceeds and describes the male *orates*, *Hew.*, as the male of the present species. For further reference see *Miskin's* able paper in *Linn. Soc. of N.S.W. Proc.*, ser. 2, V., p. 26, 1886.

28. *O. OLANE*, *Hew.*

Cat. Lyc., B. M., p. 2, n. 10, t. 1, fig. 10-11, 1862.

One male of this species was recently captured at Kent Town (near Smith's brewery) by my young friends the Messrs. Angel. Not previously recorded from here. Whilst writing on this genus, it may be interesting to state that the young larvæ are usually found covered with ants, which are said to feed on the sweet secretion which this (and other genera) usually emit. My valued correspondent, Mr. F. Spry, of Melbourne, is of opinion, however, that the ants use the bodies of the larva to clean themselves, like a doormat, as he puts it; this is more noticeable in one species, *i.e.*, *O. abrota*, which is covered with short stiff hairs, making his argument more conclusive. Another curious fact he mentions is that in breeding the different species the ants, when placed in confinement with the larvæ, rapidly die. One would think, however, that if the ants feed on the secretion emitted they could live as well confined as in natural conditions, but such it seems is not the case, so that it remains for those who have the opportunities to settle the question satisfactorily. I may mention that the above-named gentleman has bred several of the genus, and can speak with a certain amount of authority; and in concluding his remarks he mentions that the larvæ are greatly subject to the attacks of parasitic hymenoptera, diptera, and fungoid diseases, which no doubt accounts for their rarity; and states that some of the species use the empty gall-cases of diptera, &c., to live in. This is more noticeable when the eggs are laid on the close-barked *Eucalyptus melliodora*, as the larvæ, instead of wasting their energy by endeavouring to get under the tough bark, adapt themselves to circumstances, and take possession of the gall-chambers.

PAMPHILA.

29. *P. GRACILIS*, *Tepper.*

Hesperilla gracilis, Trans. Roy. Soc. S.A., IV., p. 34, t. 2, f. 7, 1882.

Six specimens taken in December at Henley Beach.

APAUSTUS, *Hb.*30. *AP. AGRAULIA*, *Hew.*

Ancyloxypha agraulia, *Hew.*, Desc. Hesp., p. 45, n. 3, 1868.

Syn.—*Pamphila sunias*, *Feld.*, Sitzb. Ak. Wiss. Wien. Math. Nat. bl., XI., p. 462, n. 54, 1860.

Not previously recorded from South Australia. Slape's Gully, two specimens, and Botanic Gardens, Adelaide, in February and March; not uncommon frequenting blossoms of *Gomphrena*

officinalis (Globe Amaranth) and *Centranthus ruber*, flying swiftly in sunlight.

TRAPEZITES, *Hub.*

31. TRAP. PHILLYRA, *Miskin.*

Proc. Roy. Soc. Queensland, p. 152, 1889.

One fine specimen of this beautiful species at Blackwood in October, not previously recorded from South Australia.

32. TRAP. PHIGALIA, *Hew.*

Hesp. p, Desc. Hesp., p. 32, n. 23, 1868.

I have a specimen doubtfully referable to this species from Port Lincoln.

33. TRAPEZITES LUTEA, *Tepp.*

Hesperilla lutea, Tr. Royal Soc. S.A., IV., p. 33, t. 2, f. 6, 1882; *Trap. petalia*, *Misk.*, Ann. Q. Museum, I., 1891, p. 78.

Two specimens, Slape's Gully, in December.

Miskin in his 1891 catalogue makes this species synonymous with *T. petalia*, *Hew.*, while *Tepper* himself considers his *Hesperilla quadrimaculata* identical with it (*i.e.*, *petalia*). I have received a specimen of a male "petalia" from Mr. R. Illidge, of Brisbane, which is certainly distinct from any taken here. My opinion is that *Tepper's Hesp. trimaculata* is the male of his *quadrimaculata*, but in the absence of proper literature I cannot decide the question satisfactorily. The whole of the *Hesperidæ* are in a very unsatisfactory condition, and when my promised literature is at hand, I will give my deliberations to our Society.

34. TRAP. TRIMACULATA, *Tepp.*

Hesperilla T., Trans. Roy. Soc. S.A., IV., p. 32, t. 2, f. 4, 1882.

Several specimens, *all males*, at Belair, frequently dry rocky ground in November.

35. TRAP. QUADRIMACULATA, *Tepp.*

Tr. Roy. Soc. S.A., IV., p. 32, t. 2, fig. 2, 1881.

Two *females* at Blackwood, 11th November, also from Balhannah. As before stated, I am of opinion that this and the preceding are sexes of the same species. Not having taken the opposite sex in either case seems more convincing.

HESPERILLA.

36. HESP. DONNYSA, *Hew.*

Male. Desc. *Hesp.*, p. 39, n. 3, 1868.

One sp., from Port Lincoln, in December. Not previously recorded from here.

37. HESP. ATRALBA, *Tepp.*

Trans. Roy. Soc. S.A., IV., p. 33, t. 2, f. 5, 1882.

One sp., from Port Lincoln (Rev. T. Blackburn).

38. HESP. DACTYLIOTA, *Meyr.*

Telesto D., Tr. Linn. Soc. N.S.W., ser. 2, II., p. 831, 1888.

I have not seen this species. In the original description it is stated to occur at Port Lincoln and to be common in West Australia; but Mr. Meyrick writes that the species is unique in his collection.

TARACTROCERA, *Butler.*39. T. BIFASCIATA, *Tepp.*

Hesp. bifasciata, Tr. Roy. Soc. S.A., IV., p. 32, t. 2, f. 4, 1882; Tar. flavovittata, *Miskin*, Cat., 1891.

One sp., Lyndoch (*Tepper*). *Miskin* is under the impression that this is *T. flavovittata*, *Satr.*, and as the type (*bifasciata*) is lost, the question must be left in abeyance for the present.

40. T. PAPHYRIA, *Bdc.*

Hesp. p., Voy. Astr. Lep., p. 166, 1832.

Syn.—*Hesperilla fumosa*, *Guest*, Tr. Roy. Soc., S.A., V., 1882; *Apaustus minimus*, *Misk.*, Proc. R. Soc. Q., p. 153, 1889.

Parkside, Woodside, Balhannah, December to March, frequenting stinkwort (*Inula graveolens*).

The following are reputed South Australian species:—

41. DELIAS HARPALYCE, *Don.*, *Tepper's* list.
42. " ARGENTHONA, *Fab.*, *Tepper's* list.
43. CHRYSOPHANUS AURIFER, *Blanch.*
44. HOLOCHILA ACASTA, *Cox.*
45. IALMENUS EVAGORAS, *Don.**
46. HESPERILLA DIRPHIA, *Hew.*
47. TARACTROCERA CELGENO, *Cox.*

Not having seen or taken specimens in South Australia, I omit them for the present.

* On reference to *Tepper's* Common Native Insects of S.A. part II., I find that his description applies to *inous*, *Hew.*, so that *evagoras*, *Don.*, can be struck off the list.